JEFX 02 Industry Day Time Critical Targeting Functionality (TCTF) 31 MAY - 01 JUN 2001

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Outline

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- **Background**
- **TCT infrastructure functionality**
- **TCTF and TBMCS**
- **Summary**

Background

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- **Multiple TCT applications developed under separate contracts over the course of several years**
  - **Joint Terrain Analysis Toolkit (JTAT)**
  - **Automated Assistance With Intelligence Preparation of the Battlespace (A2IPB)**
  - **Time Critical Targeting Aid (TCTA)**
  - **Attack Operations Decision Aid (AODA)**
- **TCT application interfaces developed under SoftWare Interoperability Facility for Time Critical Targets (SWIFT) Contract**
- **TCT Functionality contract awarded on 4 May 01 IAW TCT ORD**
- **TCT Functionality increment releases IAW AFI 63-123**
  - **Pre-Core (1 and 2)**
  - **Core (ORD Threshold Requirements)**
  - **Post Core (ORD Objective Requirements)**
- **TCT Functionality interfaces to TBMCS**

What is TCT Infrastructure Functionality?
The TCT Prosecution Kill Chain

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What is TCT Infrastructure Functionality? Components

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- **Find**
  Joint Terrain Analysis Toolkit (JTAT)
  Automated Assistance with Intelligence Preparation of the Battlespace (A2IPB)

- **Fix, Track**
  Joint Services Workstation (JSWS)

- **Target**
  Attack Operations Decision Aid (AOI

Terrain Analysis

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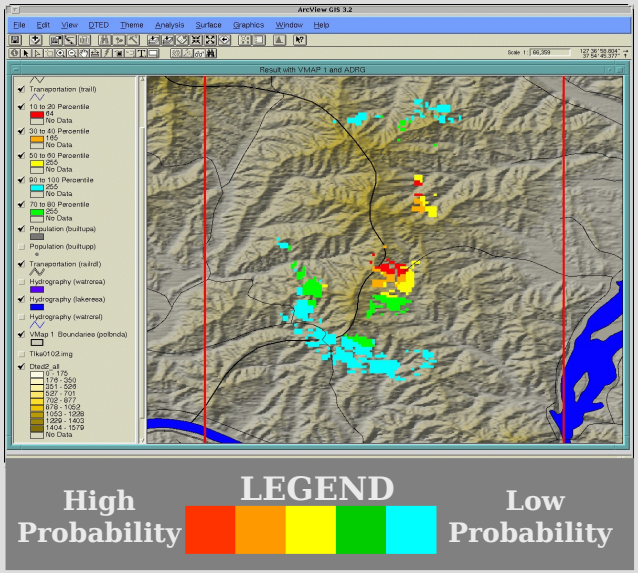
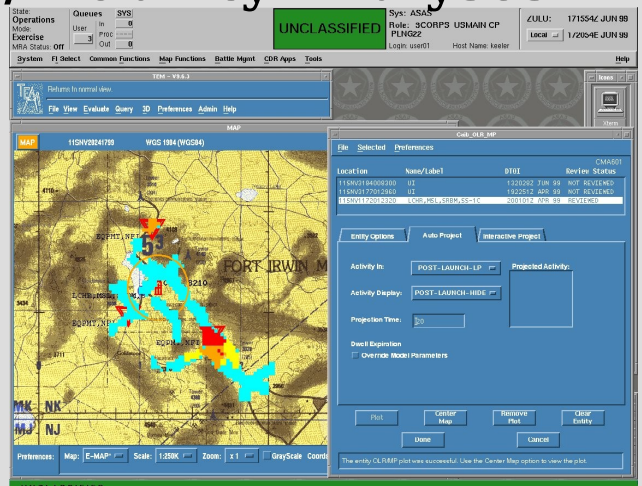
BOR



errain/Mobility Analyses



- **Determines operating areas of TCTs, refines threat location estimates, estimates future threat locations, and projects mobile TCT operational areas**
- **Performs terrain analysis, movement projection (MP) and Battlespace Observation Refinements (BOR)**
- **Distributes products to A2IPB**
  - **BORs**
  - **MPs**
  - **Terrain suitability**
- **Web based distribution**
  http://kish.tec.army.mil:8080/

Intelligence Preparation of the Battlespace (IPB)

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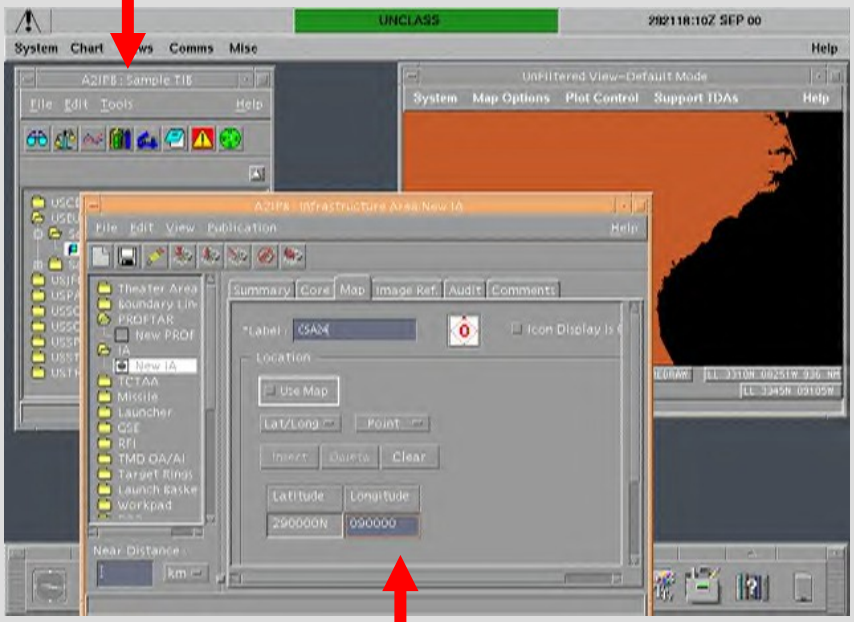
Main Window
Access Analytical Tools



Browser Window
Data Creation/Display

- Provides computer assistance with IPB IAW established IPB methodology
  - Define Battlespace Environment (Focus)
  - Describe Battlespace Effects (Influences)
  - Evaluate Threat (Model)
  - Determine Threat COAs (Integrate)
- Creates & publishes IPB products in XML format
  - Enemy COAs
  - NAIs/TNIs
  - Probable Operating Zones
  - TCT Activity Area (TCTAA)
- Utilizes Broadsword intelligence search engine

Target Identification and Nomination)

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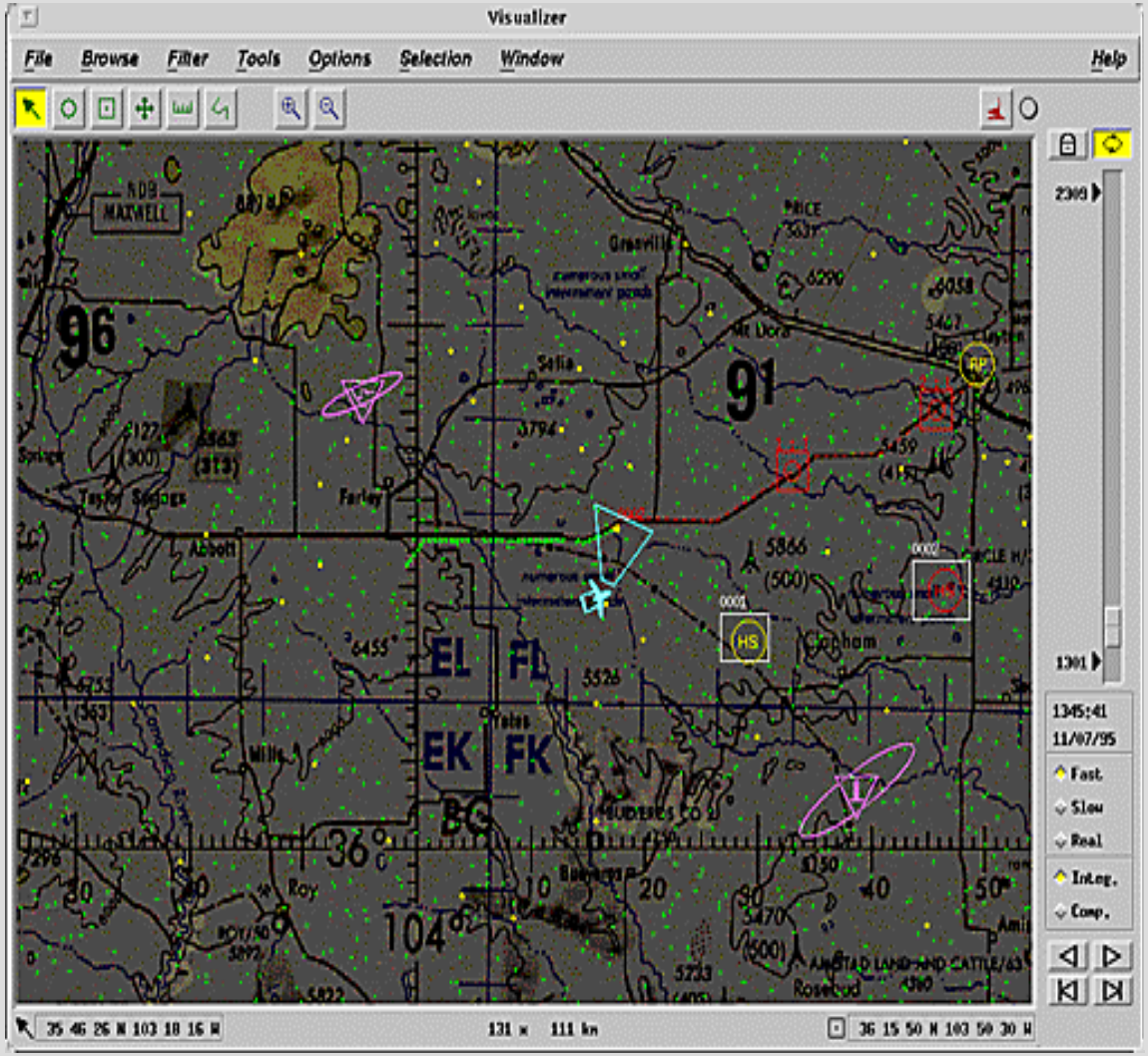

- **Supports identification of TCTs and tracks ground targets using MTI/SAR data**
  - **Displays near real time ground situation**
  - **Supports operator correlation of tracked targets with available intelligence and imagery**
  - **Provides data manipulation tool set**
  - **Retrieves XML**

Weapon-Target Pairing

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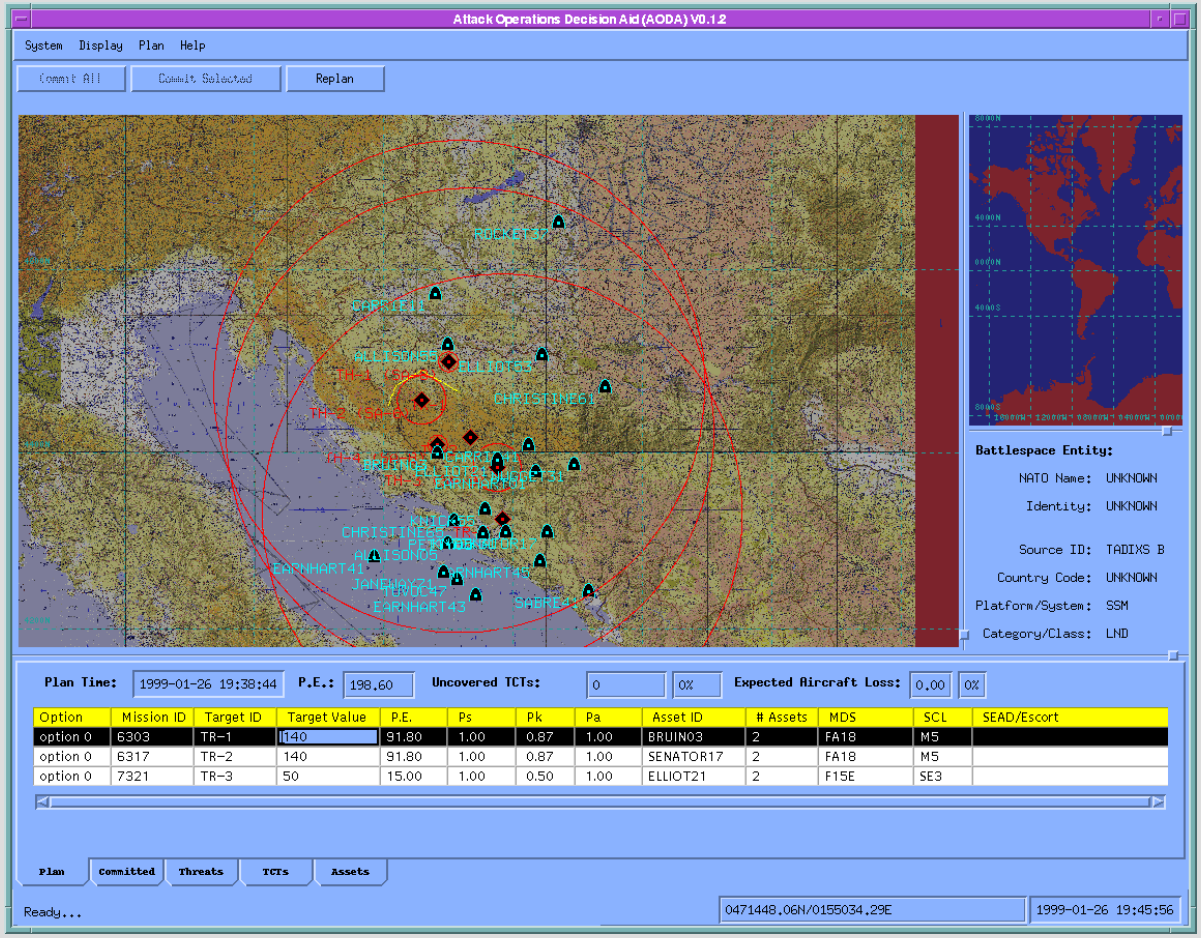

- **Recommends prioritized strike platform-TCT pairings**
- **Supports operator evaluation & refinement of recommended plan**
- **Receives XML formatted IPB data**
- **Displays ATO asset/target pairings**
- **Reuses diverted assets**
- **Aggregates threats**
- **Incorporates CASAS data**

Time Critical Targeting Functionality & TBMCS

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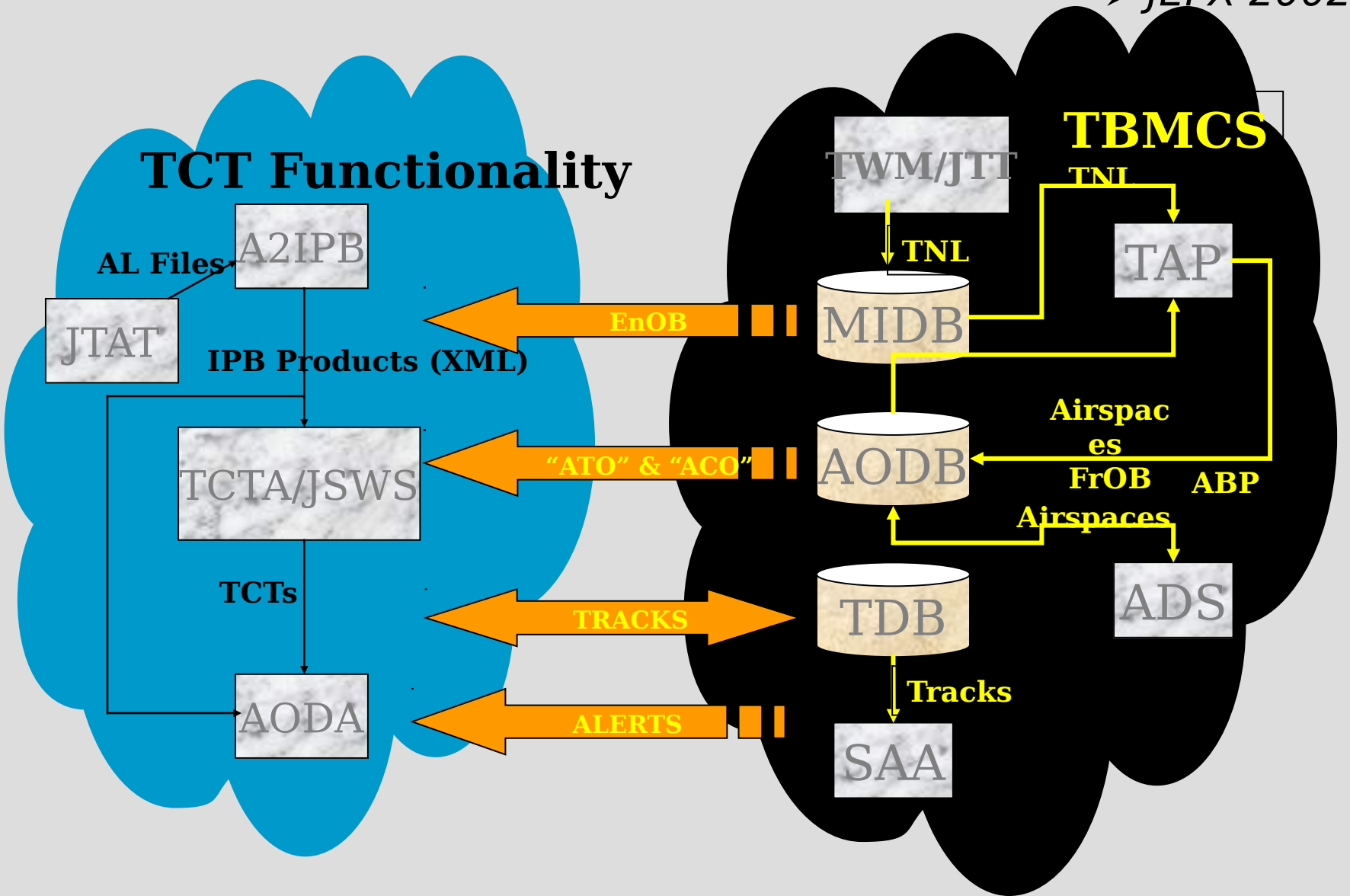

Summary

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- **TCTF Infrastructure provides advanced support for TCT prosecution**
  - **Terrain analysis**
  - **IPB**
  - **TCT identification and nomination**
  - **Optimized weapon-target pairing**
- **Web enabled (JTAT)**
- **XML product distribution (A2IPB)**
- **Will interface with TBMCS 1.2**
- **Integrated set of TCT applications to meet TCT ORD**